

AUDIO PRODUCTIONS II

COURSE DESCRIPTION

Audio Production II is designed to give students the advanced knowledge and technical skills needed to prepare them for post-secondary study or entry level employment in the audio industry. Students will develop skills in which to conduct complete recording sessions as well as building skills in mix-down, mastering, and other post production techniques. In all situations, students will present themselves with integrity and professional behavior.

It is strongly recommended that administration and guidance follow the scope and sequence and course recommendations as listed.

Recommended: Audio Production I

Recommended Credits: 1

Grade Levels: 11th – 12th

Number of Competencies: 62

AUDIO PRODUCTION II

STANDARDS

- 1.0** Students will perform safety examinations and maintain safety records.
- 2.0** Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.
- 3.0** Students will integrate reading, writing, math, and science skills and understand the impact of academic achievement in the workplace.
- 4.0** Develop advanced skills using MIDI (musical instrument digital interface) and music creation software.
- 5.0** Students will show knowledge of advanced console functions in recording and live applications.
- 6.0** Students will demonstrate advanced knowledge of microphones and miking techniques.
- 7.0** Students will demonstrate use and advantages of special effects equipment.
- 8.0** Students will properly use basic tools and test equipment.
- 9.0** Students will demonstrate ability to mix-down and master audio recordings.
- 10.0** Students will complete a final production portfolio.
- 11.0** Students will evaluate recorded and live audio for content, style, and quality.

AUDIO PRODUCTION II

STANDARD 1.0

Students will perform safety examinations and maintain safety records.

LEARNING EXPECTATIONS

The student will:

- 1.1** Demonstrate a positive attitude regarding safety practices and issues.
- 1.2** Use and inspect personal protective equipment.
- 1.3** Inspect, maintain, and employ safe operating procedures with tools and equipment, such as hand and power tools, ladders, scaffolding, and lifting equipment.
- 1.4** Demonstrate continuous awareness of potential hazards to self and others and respond appropriately.
- 1.5** Assume responsibilities under HazCom (Hazard Communication) regulations.
- 1.6** Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies to protect coworkers and bystanders from hazards.
- 1.7** Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies regarding reporting of accidents and observed hazards, and regarding emergency response procedures.
- 1.8** Demonstrate appropriate related safety procedures.
- 1.9** Pass with 100 % accuracy a written examination relating to safety issues
- 1.10** Pass with 100% accuracy a performance examination relating to safety.
- 1.11** Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 1.1A** Is attentive during safety discussions.
- 1.1B** Actively seeks information about safe procedures.
- 1.1C** Responds positively to instruction, advice, and correction regarding safety issues.
- 1.1D** Does not deliberately create or increase hazards, such as by horseplay, practical jokes, or creating distractions.
- 1.1E** Reports to school or work physically ready to perform to professional standards, such as rested, or not impaired by medications, drugs, alcohol, etc.
- 1.2** Selects, inspects, and uses the correct personal protective equipment for the assigned task.
- 1.3A** Inspects power tools for intact guards, shields, insulation, and other protective devices.
- 1.3B** Inspects extension cords for the presence of a functional ground connection, prior to use.
- 1.3C** Operates and maintains tools in accordance with manufacturer's instructions and as required by regulation or company policy.
- 1.3D** Properly places and secures ladders and scaffolding prior to use.
- 1.4A** Is observant of personnel and activities in the vicinity of the work area.

- 1.4B** Warns nearby personnel, prior to starting potentially hazardous actions.
- 1.5A** When asked to use a new hazardous material, retrieves MSDSs (material safety data sheets), and identifies the health hazards associated with the new material.
- 1.5B** Reports hazards found on the job site to the supervisor.
- 1.6A** Erects shields, barriers, and signage to protect coworkers and bystanders prior to starting potentially hazardous tasks.
- 1.6B** Provides and activates adequate ventilation equipment as required by the task.
- 1.7A** Reports all injuries to self to the immediate supervisor.
- 1.7B** Reports observed unguarded hazards to their immediate supervisor.
- 1.8A** Complies with personal assignments regarding emergency assignments.
- 1.9A** Passes with 100% accuracy a written examination relating specifically to content area.
- 1.10A** Passes with 100% accuracy a performance examination relating specifically to welding tools, equipment and supplies.
- 1.11A** Maintains a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.

SAMPLE PERFORMANCE TASKS

These are sample projects of the type and scale recommended to address one or more of the learning expectations for this standard. Other projects can be used at the instructor's discretion.

- Conduct a practice drill simulating a hazardous solvent spill in which an emergency action plan is to be implemented.
- Instruct a visitor to obviously approach the vicinity of a student conducting a hazardous activity and note the level of awareness demonstrated by the student.
- For a project requiring the use of ladders and/or scaffolding, note the proper placement and securing procedures followed by students.

INTEGRATION LINKAGES

Language Arts, Mathematics, Technical Algebra, Technical Geometry, Algebra, Geometry
English IV: Communication for Life, SkillsUSA Technical Championships, American Welding Society (AWS), Guide for Training and Qualification of Entry Level Welder, National Center for Construction Education Research (NCCER), Secretary's Commission on Achieving Necessary Skills (SCANS), Professional Development Program, SkillsUSA

AUDIO PRODUCTION II

STANDARD 2.0

Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.

LEARNING EXPECTATIONS

The student will:

- 2.1** Cultivate positive leadership skills.
- 2.2** Participate in the student organization directly related to their program of study as an integral part of classroom instruction.
- 2.3** Assess situations, apply problem-solving techniques and decision-making skills within the school, community, and workplace.
- 2.4** Participate as a team member in a learning environment.
- 2.5** Respect the opinions, customs, and individual differences of others.
- 2.6** Build personal career development by identifying career interests, strengths, and opportunities.

PERFORMANCE STANDARDS: EVIDENCE STANDARD IS MET

The student:

- 2.1A** Demonstrates character and leadership using creative-and critical-thinking skills.
- 2.1B** Uses creative thought process by “thinking outside the box.”
- 2.2A** Relates the creed, purposes, motto, and emblem of their student organization, directly related to personal and professional development.
- 2.2B** Plans and conducts meetings and other business according to accepted rules of parliamentary procedure.
- 2.3A** Makes decisions and assumes responsibilities.
- 2.3B** Analyzes a situation and uses the Professional Development Program or career technical student organization materials directly related to the student’s program of study to resolve it.
- 2.3C** Understands the importance of learning new information for both current and future problem solving and decision making.
- 2.4A** Organizes committees and participates in functions.
- 2.4B** Cooperates with peers to select and organize a community service project.
- 2.5A** Researches different customs and individual differences of others.
- 2.5B** Interacts respectfully with individuals of different cultures, gender, and backgrounds.
- 2.5C** Resolves conflicts and differences to maintain a smooth workflow and classroom environment.
- 2.6A** Creates personal career development by identifying career interests, strengths, and opportunities.
- 2.6B** Identifies opportunities for career development and certification requirements.
- 2.6C** Plans personal educational paths based on available courses and current career goals.

2.6D Creates a resumé that reflects student's skills, abilities, and interests.

SAMPLE PERFORMANCE TASKS

- Create a leadership inventory and use it to conduct a personal assessment.
- Participate in various career technical student organizations' programs and/or competitive events.
- Implement an annual program of work.
- Prepare a meeting agenda for a specific career technical student organization monthly meeting.
- Attend a professional organization meeting.
- Develop a program of study within their career opportunities.
- Participate in the American Spirit Award competition with SkillsUSA.
- Complete *Professional Development Program Level I and Level II*, SkillsUSA.

INTEGRATION LINKAGES

SkillsUSA, *Professional Development Program*; SkillsUSA; Communications and Writing Skills; Teambuilding Skills; Research; Language Arts; Sociology; Psychology; Math; Technical Math; English IV: Communication for Life; Social Studies; Problem Solving; Interpersonal Skills; Employability Skills; Critical-Thinking Skills; Secretary's Commission on Achieving Necessary Skills (SCANS); Chamber of Commerce; Colleges; Universities; Technology Centers; Secretary's Commission on Achieving Necessary Skills (SCANS)

AUDIO PRODUCTION II

STANDARD 3.0

Students will integrate reading, writing, math, and science skills and understand the impact of academic achievement in the work place.

LEARNING EXPECTATIONS

The student will:

- 3.1** Assume responsibility for accomplishing classroom assignments and workplace goals within accepted time frames.
- 3.2** Develop advanced study skills.
- 3.3** Demonstrate and use written and verbal communication skills.
- 3.4** Read and understand technical documents such as regulations, manuals, reports, forms, graphs, charts, and tables.
- 3.5** Apply the foundations of mathematical principles such as algebra, geometry, and advanced math to solve problems.
- 3.6** Apply basic scientific principles and methods to solve problems and complete tasks.
- 3.7** Understand computer operations and related applications to input, store, retrieve, and output information as it relates to the course.
- 3.8** Research, recognize, and understand the interactions of the environment and *green* issues as they relate to the course work and to a global economy.

PERFORMANCE STANDARDS: EVIDENCE STANDARD IS MET

The student:

- 3.1A** Uses appropriate time management to achieve goals.
- 3.1B** Arrives at school on time each day.
- 3.1C** Completes assignments and meets deadlines.
- 3.2A** Assesses current personal study skills.
- 3.2B** Demonstrates advanced note-taking ability.
- 3.2C** Formulates appropriate study strategies for given tasks.
- 3.3A** Communicates ideas, information, and messages in a logical manner.
- 3.3B** Fills out forms, reports, logs, and documents to comply with class and project requirements.
- 3.4A** Reads and understands technical documents and uses industry jargon, acronyms, and terminology appropriately.
- 3.4B** Recognizes the meaning of specialized words or phrases unique to the career and industry.
- 3.5A** Utilizes computation in adding, subtracting, multiplying, and dividing of whole numbers, fractions, decimals, and percents.
- 3.5B** Chooses the right mathematical method or formula to solve a problem.
- 3.5C** Performs math operations accurately to complete classroom and lab tasks.
- 3.6A** Understands scientific principles critical to the course.
- 3.6B** Applies scientific principles and technology to solve problems and complete tasks.

- 3.6C** Has knowledge of the scientific method (e.g., identifies the problem, collects information, forms opinions, and draws conclusions).
- 3.7A** Uses basic computer hardware (e.g., PCs, printers) and software to perform tasks as required for the course work.
- 3.7B** Understands capabilities of computers and common computer terminology (e.g., program, operating system).
- 3.7C** Applies the appropriate technical solution to complete tasks.
- 3.7D** Inputs data and information accurately for the course requirements.
- 3.8A** Researches and recognizes *green* trends in career area and industry.
- 3.8B** Examines current environmentally friendly trends.
- 3.8C** Applies sustainability practices by understanding processes that are non-polluting, conserving of energy and natural resources, and economically efficient.

SAMPLE PERFORMANCE TASKS

- Examine and compile different learning styles for portfolios.
- Create calendars containing all activities and obligations for one month. Discusses how to handle conflicting or competing obligations then complete daily and weekly plans showing tasks, priorities, and scheduling.
- Complete self-assessments of study habits.
- Compute precise and exact measurements.
- Explore study strategies for different subjects and tasks then analyze two homework assignments and select the best strategies for completing them.
- Create “life maps” showing necessary steps or “landmarks” along the path to personal, financial, educational, and career goals.
- Take notes during counselor classroom visits and work in small groups to create flow charts of the path options.
- List attitudes that lead to success then rate individually in these areas. Work together to suggest strategies for overcoming the weaknesses identified own and partners’ self-assessments then share with the class the strategies developed.
- Research the Internet and other technology to collect and analyze data concerning climate change.
- Keep a data file of alternative energy sources and the sources’ impact on the environment.
- Develop a recycling project at home or for the school environment.

INTEGRATION LINKAGES

SkillsUSA, *Professional Development Program*; SkillsUSA; Communications and Writing Skills; Teambuilding Skills; Research; Language Arts; Sociology; Psychology; Math; Technical Math; English IV: Communication for Life; Social Studies; Problem Solving; Interpersonal Skills; Employability Skills; Critical-Thinking Skills; Secretary’s Commission on Achieving Necessary Skills (SCANS); Chamber of Commerce; Colleges; Universities; Technology Centers; Secretary’s Commission on Achieving Necessary Skills (SCANS)

AUDIO PRODUCTION II

STANDARD 4.0

Students will develop advanced skills using MIDI (musical instrument digital interface) and music creation software.

LEARNING EXPECTATIONS

The student will:

- 4.1** Demonstrate understanding of MIDI signal flow.
- 4.2** Create an audio file using multiple styles.
- 4.3** Demonstrate understanding of music notation.
- 4.4** Demonstrate understanding of computer based audio applications and compatibility issues.
- 4.5** Demonstrate understanding of audio synchronization systems.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 4.1** Defines and creates a chart showing MIDI signal flow.
- 4.2** Builds various audio files using multiple musical styles.
- 4.3** Lists and names all the parts and notes of a musical chart.
- 4.4** Describes various computer based audio applications and how compatibility issues can develop.
- 4.5** Synchronizes various audio systems without causing compatibility issues.

SAMPLE PERFORMANCE TASK

- Create MIDI sequence for evaluation.
- Identify all parts of notation on sample of sheet music.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV: Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA), www.howstuffworks.com

AUDIO PRODUCTION II

STANDARD 5.0

Students will show knowledge of advanced console functions in recording and live applications.

LEARNING EXPECTATIONS

The student will:

- 5.1** Identify all parts of a modern mixing console.
- 5.2** Demonstrate understanding of multiple bus signal flow technology.
- 5.3** Demonstrate ability to control multiple input lines effectively in a live situation.
- 5.4** Demonstrate ability to control pre-amp gain to provide for best signal-to-noise ratio.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 5.1** Lists all parts of a modern mixing console.
- 5.2** Sets up and charts multiple bus signal flow.
- 5.3** Connects multiple input lines effectively in a live situation.
- 5.4** Identifies and selects pre-amp gain to provide for best signal-to-noise ratio.

SAMPLE PERFORMANCE TASK

- Set up a recording session.
- Describe all parts of mixing console.
- Maintain optimum signal for proper recording levels.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION II

STANDARD 6.0

Students will demonstrate advanced knowledge of microphones and miking techniques.

LEARNING EXPECTATIONS

The student will:

- 6.1** Identify the different patterns of condenser and diaphragm microphones.
- 6.2** Identify the different frequencies of condenser and diaphragm microphones.
- 6.3** Demonstrate knowledge of which microphones are best suited for various instruments or situations.
- 6.4** Identify direct sound and ambient sound and show ability to use technique to record each.
- 6.5** Analyze usage of isolation rooms, their advantages and disadvantages.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 6.1** Creates a chart showing the different patterns of condenser and diaphragm microphones.
- 6.2** Creates a chart showing the different frequencies of condenser and diaphragm microphones.
- 6.3** Selects microphones that are best suited for various instruments or situations.
- 6.4** Describes direct sound and ambient sound and how to use various techniques to record each.
- 6.5** Designs various size isolation rooms and describes their advantages and disadvantages.

SAMPLE PERFORMANCE TASK

- Record an instrument using several microphones and techniques for same instrument.
- Record an instrument or voice with same microphone both in and out of isolation room.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV: Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA), www.howstuffworks.com

AUDIO PRODUCTION II

STANDARD 7.0

Student will demonstrate use and advantages of special effects equipment.

LEARNING EXPECTATIONS

The student will:

- 7.1** Demonstrate working knowledge of reverb and delay units.
- 7.2** Demonstrate usage of dynamic processors such as compressors, gates, and expanders.
- 7.3** Demonstrate understanding of special equalization of equipment, both graphic and parametric.
- 7.4** Identify doubling techniques in both outboard gear and in-computer editing.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 7.1** Makes a list of reverb and delay units and describes their differences.
- 7.2** Incorporates dynamic processors such as compressors, gates, and expanders into recording process.
- 7.3** Defines graphic and parametric equalization and various types of equalization equipment.
- 7.4** Creates doubling effect by using outboard gear and in-computer editing.

SAMPLE PERFORMANCE TASK

- Listen and make written evaluations of effects heard in a recording.
- Create various sounds using special EQ equipment and plug-ins.
- Describe the effects of doubling.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION II

STANDARD 8.0

Students will learn the proper use of basic tools and test equipment.

LEARNING EXPECTATIONS

The student will:

- 8.1** Identify various tools and test equipment and demonstrate their use.
- 8.2** Demonstrate ability to establish signal path using basic electronic multi-meter and test tone equipment.
- 8.3** Demonstrate basic troubleshooting skills.
- 8.4** Demonstrate ability to use soldering equipment.
- 8.5** Identify various types of solder.
- 8.6** Demonstrate ability to identify and repair broken wires and connectors.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 8.1** Correctly uses tools and test equipment to repair and diagnose various wiring and equipment malfunctions.
- 8.2** Monitors a signal path using basic electronic multi-meter and test tone equipment.
- 8.3** Troubleshoots signal paths using computer and equipment skills.
- 8.4** Uses a variety of soldering irons (including cordless) to solder various connectors and equipment circuit boards.
- 8.4** Lists and describes various types of solder.
- 8.6** Identifies and repairs broken wires, connectors, and circuit boards.

SAMPLE PERFORMANCE TASK

- Troubleshoot problem with an operational recording setup.
- Replace and or repair problem item with appropriate tools.
- Solder a variety of wires and connectors.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION II

STANDARD 9.0

Students will demonstrate ability to mix-down and master audio recordings.

LEARNING EXPECTATIONS

The student will:

- 9.1** Demonstrate ability to mix-down multiple track and multiple bus recordings.
- 9.2** Demonstrate ability to perform 2 bus mix-down.
- 9.3** Demonstrate ability to perform general mastering techniques to include level adjustment, equalization, noise reduction, and song sequencing.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 9.1** Performs a mix-down of multiple track and multiple bus recordings.
- 9.2** Performs 2 bus mix-down of a single recording.
- 9.3** Develops general mastering techniques using a mastering program to include level adjustment, equalization, noise reduction, and song sequencing.

SAMPLE PERFORMANCE TASK

- Mix-down multi-track recording.
- Produce final mastered audio recording.
- Write a critique on final product.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION II

STANDARD 10.0

Students will complete a final production portfolio.

LEARNING EXPECTATIONS

The student will:

- 10.1** Establish production goals and objectives for a recording session.
- 10.2** Evaluate budget, facilities and other resources.
- 10.3** Create a budget for a professional recording session.
- 10.4** Execute a professional recording session.
- 10.5** Edit and mix for final product.
- 10.6** Evaluate and critique portfolio for meeting of goals and objectives.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 10.1** Creates a pre-production chart listing goals and objectives for a recording session.
- 10.2** Writes an evaluation of budget, facilities and other resources.
- 10.3** Creates a budget for a professional master recording session and a professional demo session.
- 10.4** Sets up and engineers a professional recording session.
- 10.5** Edits and mixes professional recording to a final mastered product.
- 10.6** Lists completed goals and objectives of portfolio.

SAMPLE PERFORMANCE TASK

- Produce a recording session from initial planning to final product.
- Create budgets for demo and master sessions.
- Student will provide critique on final product.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION II

STANDARD 11.0

Students will evaluate recorded and live audio for content, style, and quality.

LEARNING EXPECTATIONS

The student will:

- 11.1** Demonstrate ability to identify tonal and sequential anomalies.
- 11.2** Identify changes in tempo of music.
- 11.3** Identify changes in mood due to change in volume or style of recorded audio.
- 11.4** Listen and identify overloading or clipping in playback of recorded material.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 11.1** Identify tonal and sequential anomalies in a variety of music tracks.
- 11.2** Listen for and list changes in tempo of various music tracks.
- 11.3** Listen for and list changes in mood due to change in volume or style of recorded audio.
- 11.4** Correct a music track with overloading or clipping in playback of recorded material.

SAMPLE PERFORMANCE TASK

- Listen to samples of music reflecting variation in style, tempo, expression, tone, style, and mood.
- Write a critique of various music samples reflecting style, tempo, expression, tone, style, and mood.
- Remix an audio file to eliminate clipping and overloading.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
www.howstuffworks.com

SAMPLING OF AVAILABLE RESOURCES

www.howstuffworks.com

Recording in the Digital World: Complete Guide to Studio Gear and Software
by Thomas E Rudolph, Vincent A Jr Leonard

Digital Home Recording: Tips, Techniques, and Tools for Home Studio Production
edited by John Chappell

Practical Recording Techniques by Bruce Bartlett, Jenny Bartlett

Arranging in the Digital World: Techniques for Arranging Popular Music Using Today's Electronic...by Corey Allen

Promises to Keep: Technology, Law, and the Future of Entertainment by William W Fisher

Home Recording Power by Ben Milstead

On-Location Recording Techniques by Bruce Bartlett, Jenny Bartlett

This Business of Music: The Definitive Guide to the Music Industry
by M William Krasilovsky, Sidney Schemel

The Art of Digital Audio by John Watkinson

The Audiopro Home Recording Course by Bill Gibson